

Digital Marketing Strategy in The Development of Strawberry-Added Yoghurt Business in Manggihan Village, Getasan District

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ABSTRACT

This study aims to analyze digital marketing strategies, strawberry yogurt business development, and the relationship between the two variables. The location of this research is in Manggihan Village, Getasan District, Semarang Regency, has a large population of Friesian Holstein dairy cattle (over 700 head). However, marketing of dairy products, particularly strawberry yogurt developed by the Women Farmers Group (KWT), is still carried out conventionally, limiting market reach. The study used a quantitative descriptive approach with a pre-experimental One Group Pretest-Posttest design. The sample consisted of 31 members of KWT Lestari and Sumber Makmur, selected using purposive sampling. Data were collected through observation, interviews, and a marketing mix questionnaire (product, price, promotion, and place) before and after the extension program. Data were then analyzed using SWOT and Spearman Rank correlation.

The SWOT analysis results showed a total IFAS score of 2,03 and EFAS score of 1,61 with the business positioned in Quadrant I. The pretest-posttest results showed an increase in all four marketing mix indicators after the outreach program. Spearman's Rank correlation analysis yielded a coefficient of 0.603 with a very significance level of ($p < 0.01$), indicating a strong, positive, and very significant relationship between digital marketing strategies and strawberry yogurt business development.

Keywords: Business Development, Digital Marketing, Spearman's Rank, Strawberry Yogurt, SWOT Analysis

1. INTRODUCTION

The dairy cattle industry plays an important role in meeting public demand for milk products. The ability of dairy cattle to produce milk in large quantities not only contributes significantly to human nutrition but is also a major driver of the livestock economy (Nugraha & Surjowardojo, 2022). The development of information and communication technology in the current digital era has brought major changes to various sectors, including product marketing. The use of the internet and social media has driven the emergence of a new marketing strategy known as digital marketing.

Through digital platforms such as social media, marketplaces, and websites, business actors can reach consumers without geographical limitations and build direct communication with customers.

Manggihan Village is located in Getasan Sub-district, Semarang Regency, on the slope of Mount Merbabu, an area with a substantial population of Friesian Holstein (FH) dairy cattle. The abundant availability of raw milk and the presence of community groups that process milk into yogurt open opportunities for the business to develop. However, business actors still face a number of obstacles in practice, particularly in the aspect of product marketing.

Based on this background, the problems addressed in this study are: (1) how is the digital marketing strategy applied in marketing strawberry-added yogurt (*Fragaria x ananassa*) in Manggihan Village, Getasan Sub-district; (2) how does the strawberry yogurt business develop in Manggihan Village, Getasan Sub-district; and (3) what is the relationship between digital marketing strategy and the development of the strawberry yogurt business in Manggihan Village, Getasan Sub-district. Accordingly, the objectives of this study are to analyze the digital marketing strategy, to analyze the development of the strawberry yogurt business, and to analyze

the relationship between digital marketing strategy and business development in Manggihan Village, Getasan Sub-district.

Several concepts underpin this study. Agricultural extension is an educational method for primary stakeholders and business actors so that they are willing and able to support and manage themselves in obtaining information related to markets, technology, funding, and other resources, as an effort to improve yields, business efficiency, income, and welfare (Sudarmanto et al., 2021), with the aim of improving farming technical quality, farming business quality, and the quality of life of farmers and communities (Faisal, 2020). Marketing strategy is an organized way of generating value for consumers and maintaining a company's position within market competition (Lestari & Setiawan, 2021). Business development, in a broad sense, is an educational effort carried out through formal or informal channels, in a planned, coordinated, and organized manner, aimed at reflecting, improving, directing, and realizing a balanced and integrated system (Jannah et al., 2024), commonly measured through the marketing mix of four indicators known as the 4Ps: product, price, promotion, and place. Women Farmer Groups (KWT) are groups of women who actively participate in agricultural and agribusiness activities as an effort to increase human resource capacity and the success of empowerment programs in the agricultural sector (Suherman et al., 2022). Yoghurt is a widely known and one of the oldest milk fermentation products, made from the conversion of lactose in milk into lactic acid using a starter culture (Pamela, 2022), while strawberry (*Fragaria x ananassa*) is a horticultural crop with significant economic value and production potential in Indonesia (Alfatia et al., 2025). Based on this framework, it is hypothesized that digital marketing strategy is closely and positively related to the development of the strawberry yogurt business.

2. MATERIALS AND METHODS

This Final Project activity was carried out from 6 April to 4 June 2026 in Manggihan Village, Getasan Sub-district, Semarang Regency. The research used a quantitative descriptive approach with a pre-experimental One Group Pretest-Posttest design, which measures the effectiveness of a program or treatment by comparing pretest and posttest scores within the same group (Ningsih & Wibowo, 2021), following the design :

$$O_1 - X - O_2$$

The population of this study consisted of all 49 members of the Lestari and Sumber Makmur Women Farmer Groups in Manggihan Village, Getasan Sub-district, Semarang Regency. The sample was determined using purposive sampling, a non-probability sampling technique in which the researcher selects respondents based on specific criteria aligned with the research objectives. The criteria used were women farmers who own lactating dairy cattle, have experience processing cow's milk, and have access to social media, resulting in a sample of 31 respondents who met these criteria. This study used both primary and secondary data. Primary data were collected through interviews, observation, and questionnaires, while secondary data were obtained from the Manggihan Village office, the Getasan Sub-district Agricultural Extension Center (BPP), and the Semarang Regency Central Statistics Agency (BPS).

The marketing-mix questionnaire instrument was tested for validity and reliability using SPSS. Descriptive analysis was used to systematically describe the digital marketing strategy and business development variables based on a five-point Likert scale, while SWOT analysis was used to formulate the marketing strategy through Internal Factor Analysis Summary (IFAS) and External Factor Analysis Summary (EFAS) matrices. The relationship between the two variables was tested using Spearman's Rank correlation (Spearman's Rho), a non-parametric statistical method used to evaluate the strength and direction of the relationship between two ordinal or non-normally distributed variables, calculated using the formula:

$$R_s = 1 - (6\sum d_i^2) / (n(n^2-1))$$

Where R_s is the Spearman's Rank correlation coefficient, d^2 is the squared difference between ranks, and n is the number of samples or respondents.

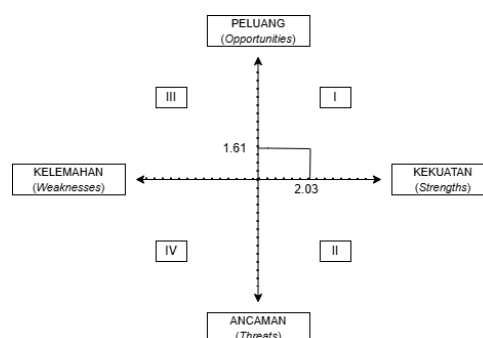
The independent variable (X) in this study is the digital marketing strategy in the development of the strawberry yogurt business, analyzed descriptively using SWOT analysis with four strategic indicators: Strength-Opportunity (SO), which uses internal strengths to take advantage of external opportunities; Weakness-Opportunity (WO), which uses available opportunities to overcome internal weaknesses; Strength-Threat (ST), which uses internal strengths to address or reduce external threats; and Weakness-Threat (WT), which minimizes internal weaknesses to avoid external threats. The dependent variable (Y) is the development of the strawberry yogurt business, measured using a validated and reliable questionnaire administered before and after the agricultural extension program to determine the extent to which business development was achieved.

3. RESULTS AND DISCUSSION

Manggihan Village, located in Getasan Sub-district, Semarang Regency, lies at an elevation of approximately 800 meters above sea level on the slope of Mount Merbabu. The village has a population of 1,791 people, most of whom work as farmers/livestock keepers. The main agricultural commodities are chili, corn, cauliflower, and strawberries, while the main livestock commodities are dairy cattle, beef cattle, sheep, and poultry.

The majority of respondents were aged 35-39 years (38.71%), which falls into the productive age category; farmers in this age group tend to be more receptive to technological innovation (Intiaz et al., 2022). As many as 48.4% of respondents had completed junior high school education, and education level has been shown to influence farmers' decisions to adopt innovation (Sofia et al., 2022). Respondents' livestock-raising experience and milk-processing business experience were both predominantly in the range of 1-5 years, and dairy cattle ownership was dominated by respondents owning 1-3 head of cattle.

The SWOT analysis showed a total IFAS score of 2.03. This indicates that strengths are more dominant in the digital marketing strategy, although weaknesses remain that need improvement. The result of this total IFAS produces the X-axis value. The total EFAS score obtained was 1.61, indicating that opportunities are more dominant although threats need to be anticipated. The result of this total EFAS produces the Y-axis value.



Based on the SWOT diagram, the digital marketing strategy for the strawberry yogurt business development in Manggihan Village falls within Quadrant I. This position indicates that the strawberry yogurt business has sufficient internal strength to maximally exploit market opportunities; Quadrant I generally indicates that a business is in a favorable condition (Noorcahyo & Ali, 2025).

The pretest-posttest results showed that the development of the strawberry yogurt business in Manggihan Village does not depend solely on product quality but also on business actors' ability to use digital technology as a marketing medium. The application of digital marketing was able to increase competitiveness, expand marketing reach, and add economic value to the product. This improvement shows that KWT members have become able to independently promote their products through digital platforms, making digital marketing strategy an effective approach to support the sustainable development of the strawberry yogurt business.

Spearman's Rank correlation analysis produced a significance value of 0.000, smaller than 0.01 ($0.000 < 0.01$), indicating a significant relationship between digital marketing strategy and the development of the strawberry yogurt business in Manggihan Village, Getasan Sub-district. Thus, H_0 is rejected and H_1 is accepted, meaning that digital marketing strategy has a real relationship with the development of the strawberry yogurt business. The correlation coefficient of 0.603 falls into the strong and positive category, indicating that the better the implementation of digital marketing strategy, the higher the level of business development achieved by business actors. This positive relationship illustrates that the use of digital media in marketing activities contributes to improved business quality, market expansion, more effective promotion, and easier product distribution.

4. CONCLUSION

Based on the results of the final project research that has been conducted, it can be concluded that:

1. The digital marketing strategy in the development of the strawberry yoghurt business in Manggihan Village falls within Quadrant I, so the appropriate strategy to be applied is the Strengths–Opportunities (SO) strategy.
2. Business development shows that the extension activities provided were able to improve the ability and readiness of Farmer Women's Group members to develop the strawberry yoghurt business more effectively and sustainably.
3. There is a highly significant ($p < 0.01$), strong (0.603), and positively directed relationship between the implementation of a digital marketing-based marketing strategy and the development of the strawberry yoghurt business in Manggihan Village.



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